REMARKS

This application has been carefully reviewed in light of the Office Action dated March 18, 2003. Reconsideration and favorable action in this case are respectfully requested.

The Examiner has objected to the amendment of January 28, 2003 as introducing new matter into the disclosure. The Examiner states that the added material not supported by the original disclosure is as follow: "concatenating said pseudo-noise sequences, or portions thereof, to generate an augmented pseudo-noise sequence."

Applicant respectfully disagrees that any new matter was added to the specification by the amendment of January 28, 2003. The amendment changed "combining" to "concatenating".

The law clearly states that using a new word to rephrase what is shown in the application is not new matter. *In re Anderson*, 471 F.2d 1237, 176 USPQ 331, 336 (CCPA 1973) ("containing" changed to "carrying" in claims). Further, the drawings may provide a written description to support a claim. *In re Wolfensperger*, 302 F.2d 950, 133 USPQ 537 (CCPA 1962).

Concatenation of data streams is a well known concept in the computer science and electrical engineering fields. From the Encarta World English Dictionary, "concatenate" is defined as:

> ***con·cat·e·nate***
> *transitive verb (past* con·cat·e·nat·ed, *past participle* con·cat·e·nat·ed, *present participle* con·cat·e·nat·ing, *3rd person present singular* con·cat·e·nates*)*
>
> *1. bring together: to connect separate units or items into a linked system*
>
> *2.* computing *link units together: to link two or more information units, such as character strings or files, so that they form a single unit*

The concatenation of a plurality of pseudo-noise sequences, or portions thereof, is clearly depicted in Figures 1, 2 and 4, and is clearly described in the text of the specification associated with these figures. For example, with regard to Figure 1, the specification states:

> A segment 16 of the PN1 sequence 14, which may be all or part of the PN1 sequence, is inserted into the PN0 sequence 12 at an arbitrary position INS_POS of the augmented PN sequence. Segment 16 has arbitrary length SEG_LTH.

Again, in connection with Figure 1, the specification states:

> It should be noted that while the embodiment of Figure 1 illustrates an augmented PN sequence wherein a single segment 16 is inserted into another PN sequence, multiple segments from multiple PN sequences could be inserted into the pseudo-noise sequence, making it even more difficult to decrypt. Further, the starting and ending points of the segment(s) and the insertion point(s) can be modified as often as every period of the augmented PN sequence to further increase complexity.

The details of concatenating difference pseudo-noise sequences is described in painstaking detail in connection with Figure 3.

Hence, the text and drawings clearly show the concatenation of two or more pseudo-noise sequences.

The Examiner has rejected claims 1-19 under 35 U.S.C. §103 as being unpatentable over U.S. Pat. No. 4,776,012 to Zscheile, Jr. in view of "Applied Cryptography, Second Edition", to Schneier (hereinafter "Schneier"). Applicant has reviewed these references in detail and does not believe that they disclose or make obvious the invention as claimed.

In the "Response to Arguments" section, the Examiner states that notwithstanding the new matter objection, the Zscheile, Jr. reference meets the definition of "concatenation" since it discloses two or more sequences being "combined".

Applicant strongly disagrees with this contention. As discussed in the previous amendment, the Zscheile reference generates a composite PN sequence *by performing a logical exclusive-or operation* on the outputs of three separate component PN sequence generators (see Figure 1 and column 2, lines 18 – 34). The composite PN sequence generator produces a "long" PN sequence that has a length equal to the product of the lengths of the component PN sequence generators. This is the only "combination" described by the Zscheile reference. Outputs of the component PN sequence generators are not linked in Zscheile. The composite PN sequence of Zscheile would bear no resemblance to any of the individual PN sequences generated by the component PN sequence generators. Hence, it is not a concatenation of two or more PN sequences.

By merely stating "combining", the Zscheile reference does not disclose all forms of combining multiple PN sequences. Zscheile discloses a single form of combination, i.e., combination by performing logical operations on the outputs of multiple PN sequences, which is significantly different than the concatenation claimed in the present application, and which does not offer the benefits of the present invention.

Accordingly, Applicant respectfully requests allowance of independent claims 1 and 10. Since dependent claim groups 2-9 and 11-19 are dependent upon claims 1 and 10, respectively, Applicant requests allowance of these claims as well.

An extension of one month is requested and a Request for Extension of Time under § 1.136 with the appropriate fee is attached hereto.

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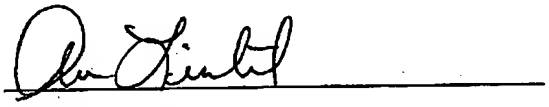
The Commissioner is hereby authorized to charge any fees or credit any overpayment, including extension fees, to Deposit Account No. 20-0668 of Texas Instruments Incorporated.

Applicant has made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Alan W. Lintel, Applicant's Attorney at (972) 664-9595 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,



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